Non-CO_2 Greenhouse Gases: High-GWP Gases

Source/Sectors: Substitution of ODS/Sterilization

Technology: Options for reducing high-GWP emission from sterilization (C.1.6)

Description of the Technology:
Sterilization is used to control microorganisms and pathogens during the growing, collecting, storing and distribution of various foods including grains, vegetable, and fruits. Many low temperature sterilization techniques utilize an ethylene oxide/CFC mixture. Currently the USEPA Vintaging Model assumes that this sector has not transitioned to any HFC or PFC uses as an ODS substitute (Godwin *et al.*, 2003). No technological options for reducing HFCs or PFCs from this sector were found from the literature search.

Effectiveness: Not applicable

Implementability: Not applicable

Reliability: Not applicable

Maturity: Not applicable

Cost Effectiveness: Not applicable

Industry Acceptance Level: Not applicable

Limitations: Not applicable

Sources of Information:

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12. UNEP - United Nations Environment Programme (1999a) “The Implications to the Montreal Protocol of the Inclusion of HFCs, and PFCs in the Kyoto Protocol”, HFC and PFC Task Force of the Technology and Economic Assessment Panel, New York, October 1999.
13. UNEP - United Nations Environment Programme (1999b) “Report of the Solvents, Coatings, and Adhesive Technical Options Committee (STOC): 1998 Assessment”, Ozone Secretariat, April 1999.
14. UNEP - United Nations Environment Programme (2002) “Report of the Aerosols, Sterilants, Miscellaneous Uses and Carbon Tetrachloride: 2002 Assessment”, Technical Options Committee, United Nations Environment Programme.